

turreted spire and twisted, plait-like columella. It bears the greatest resemblance to Currier's *intertexta*, which has been considered a synonym of *Stagnicola catascopium*. A somewhat similar form, believed to be ancestral to *intertexta*, has recently been found in Pleistocene deposits in Wisconsin. The fossils from Grand Coulee appear to be of an extinct species, although it may yet be found living in the northern part of British America.

NOTES OF THE MOLLUSCA OF SOUTHEASTERN UTAH

BY RALPH V. CHAMBERLIN AND ELMER BERRY

The mollusca listed in the present paper were for the most part taken by the authors and associate members of a field expedition from the University of Utah during April, 1928. While most of the collecting, which was carried on in connection with other work, was done in San Juan County, some material was secured in adjacent parts as indicated under the separate forms below. The region covered is largely desert in character and so unfavorable for the group. Mr. Berry deserves credit for the material obtained.

Pisidium variabile Prime. Moab, Grand Co., three specimens occurring with *P. abditum* Hald.; Fruita, Wayne Co., a number of very small specimens.

Pisidium abditum Haldeman. Torrey, San Juan Co., one specimen; Moab, Grand Co., several mature specimens; south of Colorado River, near Moab, three specimens taken with *P. variabile* Prime.

Vallonia pulchella (Müller). Moab, Grand Co.

Vallonia albula Sterki. Verdure San Juan Co.; Torrey, Wayne Co., one specimen.

Vallonia gracilicosta Reinhardt. Verdure, San Juan Co.; Fruita, Wayne Co.

Oreohelix depressa (Cockerell). LaSal Mts., San Juan Co.,

at 10,000 ft. (V. M. Tanner Coll.) on Mt. Tukuhnikivatz. In these specimens the spire is rather low. Two reddish bands of variable width on periphery.

Oreohelix sp. Near Bluff, San Juan Co. One specimen lacking spire and with keeled periphery. Probably washed down from higher level.

Microphysula ingersolli (Bland). Mt. Tukuhnikivatz, LaSal Mts., San Juan Co. One specimen (U. of U. Zool. Mus. No. 1481) collected by V. M. Tanner.

Pupilla hebes (Ancey). San Juan Co., (Pilsbry, 1921).

Pupilla syngenes dextroversa (Pilsbry and Vanatta). Verdure, San Juan Co.; Torrey and Fruita, Wayne Co.

Vertigo coloradensis (Cockerell). Between Blanding and Verdure, San Juan Co. One specimen apparently weathered and with palatal folds undeveloped, length $1\frac{1}{2}$ mm.; Verdure, San Juan Co., also weathered and with only columellar and parietal teeth showing.

Cochlicopa lubrica (Müller). Verdure, San Juan Co.; and between Verdure and Blanding, San Juan Co.

Vitrina alaskana Dall. Verdure, San Juan Co.; between Verdure and Blanding, San Juan Co.; Fruita, Wayne Co.

Vitrea indentata (Say). Verdure, San Juan Co.; and between Verdure and Blanding, San Juan Co.

Euconulus fulvus alaskensis (Pilsbry). Eight miles north of Monticello, San Juan Co., in very dry leaves; Verdure, San Juan Co.; between Blanding and Verdure, San Juan Co.; Fruita, Wayne Co.

Zonitoides arborea (Say). Verdure, San Juan Co.; between Verdure and Blanding, San Juan Co.; Bluff, San Juan Co.; Mt. Tukuhnikivatz, LaSal Mts., San Juan Co. (V. M. Tanner); Moab, Grand Co.; Fruita, Wayne Co.

Agriolimax agrestis (Linnaeus). Verdure, San Juan Co.; north of Blanding, San Juan Co.; Moab, Grand Co.; Fruita, Wayne Co.

Agriolimax campestris (Binney). Price, Carbon Co.

Gonyodiscus cronkhitei (Newcomb). Verdure, San Juan Co.; Fruita, Wayne Co.

Gonyodiscus cronkhitei anthonyi (Pilsbry). Verdure, San Juan Co.

Gonyodiscus shimeki cockerelli (Pilsbry). Mt. Tukuhnkivat, LaSal Mts., San Juan Co. (V. M. Tanner Coll.). Several fine specimens (U. of U. Zool. Mus. No. 1482).

Helicodiscus eigenmanni Pilsbry. Between Blanding and Verdure, San Juan Co., one shell, immature, pale yellow in color, diameter slightly over 3 mm.; Verdure, San Juan Co., two shells, weathered and immature.

Succinea grosvenori Lea. Blanding, San Juan Co.; between Blanding and Verdure, San Juan Co.; Moab, Grand Co.

Succinea avara Say. Moab, Grand Co.; Fruita, Wayne Co.; Salina, Sevier Co.

Stagnicola (Hinkleyia) caperata Say. Moab, Grand Co.; Torrey, Wayne Co.

Fossaria parva (Lea). Moab, Grand Co.

Fossaria modicella (Say). Torrey, Wayne Co.

Gyraulus vermicularis (Gould). Price, Carbon Co.

Physella ampullacea (Gould). Moab, Grand Co.

Physella virgata (Gould). Bluff, San Juan Co.; Moab, Grand Co.; Price, Carbon Co.

EGG LAYING AND BIRTH OF YOUNG IN THREE SPECIES OF VIVIPARIDAE

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Recent observations of Frömming (Arch. f. Molluskenkunde 60:283-4, 1928) on birth in *Viviparus viviparus* led me to offer my observations on this phenomenon in other species of so-called viviparous snails for publication. Three large *Viviparus contectoides* were collected in a pond near the Zoology Building (3-26-28) and were placed in a fingerbowl of water in my laboratory. At 8.30 the next morning there were three eggs without any trace of a